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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GOUGH, TIFFANY MAUREEN

ART UNIT

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1657

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,591	Applicant(s) LEE, SANG MOON	
	Examiner TIFFANY M. GOUGH	Art Unit 1657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. The Office inadvertently did not include claims 3-5 in the last Office action mailed 1/9/2009. Claims 1-5 are pending and have been considered on the merits. All amendments and arguments have been fully considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2 and dependent claims 3-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 is considered a product by process claim for which applicant is not enabled. Specifically, applicant clearly states throughout the specification that the **living** organism, the epidermis, is influenced by electromagnetic radiation (see p.7), further explains the interactions, electrical and light, creating oscillation energy (p.6) of the **living** organism tissue (p.7-1). Applicant clearly discloses a **living** organism, which is

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used and manufactured for detecting a bio-electromagnetic signal by using epidermal tissues of **living** organisms. However, applicant is claiming using epidermal tissue separated from a carcass of an organism. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention. Given the obvious differences between a living organism and a carcass or non-living item and the functionalities of such, one of ordinary skill in the art would not expect to be able to use a dead, processed, epidermis to detect a bio-electromagnetic signal. Throughout the present specification applicant repeatedly refer to the epidermis as a solid living organism and further characterizes the epidermis of a "living" organism. Applicant continuously teaches the electric potential in "living" organisms. How is the epidermis of a dead animal a "living" organism? Further, applicants attention is directed to p. 21, lines 19-22, p. 22, lines 18-23, p. 23, lines 1-4. Further, applicant states on p. 5 of the reply filed 10/27/2008 that support for "cutting the epidermis to fit on the head of a probe" can be found at p. 23, lines 1-2. However, applicant teaches using a solid living bio-material on the head of a probe. Thus in view of the lack of any specific guidance with respect to the how a dead organism other than what is encompassed by the claims could be used in such a method, one skilled in the art would would further have to determine through undue experimentation, without guidance from the specification, how to perform such detection using the epidermis of a dead animal's carcass.

Undue experimentation would be required to practice the invention as claimed due to the quantity of experimentation necessary to manufacture a product for the detection of a bio-electromagnetic signal, limited amount of guidance and limited number of working examples in the specification because applicant only shows working examples of using the epidermis in soil as fertilizer; nature of the invention; state of the prior art; predictability or unpredictability in the art; and breadth of the claims. *In re Wands*, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

Response to Arguments

Applicant's arguments filed 4/9/2009 have been fully considered but they are not persuasive. Applicant argues that the specification provides description of solid bio-material from epidermal tissues of living tissue **and** carcasses for the detection of an electromagnetic signal. Applicant further states that the "carcass" is clearly described and that carcass as well as living organism is defined in the specification.

It is the examiner's position that Applicant has not provided any pages or line numbers as to where such definitions can be found. After extensive examination of the specification, the examiner has found no such definitions. The specification does not disclose carcass and living organism as alleged. Clearly defining a carcass as a living organism is nonsensical. The definition of "carcass" is the dead body of an animal. A carcass is clearly not living nor is the processed epidermis as described by applicant in the specification. Applicants prophetic examples, theories, and functionalities are all disclosed of being those of a "solid **living** bio-material." Applicant argues that one of

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skill in the art would understand that the invention seeks the creation of bio-material that has the characteristics of the epidermis similar to those found in living organism as described in the Background Art section. No such Background art section exists in the originally filed specification. Clearly one of skill in the art knows the characteristics of the epidermis of a living organism, however, one of skill in the art would not assume that a dead, processed, oxidized, dried, irradiated, epidermis has the same properties and functionalities. Should one of skill in the art assume that leather shoes are capable of being a solid bio-material used for the detection of electromagnetic signals?

Applicant repeatedly refers to the invention as a solid living organism (see p. 25, lines 1-5, for example). Applicant's only examples consist of using bird feathers in soil, which is clearly not a **"solid living organism."** Applicant also asserts that the description of page 16 is directed to using both living and dead epidermis and that using both living and dead in the inventive product and process meets the enablement requirement. Applicant is claiming using and making a **dead** epidermis. Applicant discloses a **living organism**. Applicant has not met the enablement requirement.

Claims 1, 2 and dependent claims 3-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, the amendment "...**about** 40C and **about** -25C..." introduces new matter, which is not described in the specification as originally filed. Further, the amendment to the claims filed on 6/25/2008 does not comply with the requirements of 37 CFR 1.121(c) because applicant added "**about**" to claims 1 and 2 without proper text markings. Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c) which states:

(c) *Claims*. Amendments to a claim must be made by rewriting the entire claim with all changes (e.g., additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

(1) *Claim listing*. All of the claims presented in a claim listing shall be presented in ascending numerical order. Consecutive claims having the same status of "canceled" or "not entered" may be aggregated into one statement (e.g., Claims 1–5 (canceled)). The claim listing shall commence on a separate sheet of the amendment document and the sheet(s) that contain the text of any part of the claims shall not contain any other part of the amendment.

(2) *When claim text with markings is required*. All claims being currently amended in an amendment paper shall be presented in the claim listing, indicate a status of "currently amended," and be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. Only claims having the status of "currently amended," or "withdrawn" if also being amended, shall include markings. If a withdrawn claim is currently amended, its status in the claim listing may be identified as "withdrawn—currently amended."

(3) *When claim text in clean version is required*. The text of all pending claims not being currently amended shall be presented in the claim listing in clean

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version, *i.e.*, without any markings in the presentation of text. The presentation of a clean version of any claim having the status of “original,” “withdrawn” or “previously presented” will constitute an assertion that it has not been changed relative to the immediate prior version, except to omit markings that may have been present in the immediate prior version of the claims of the status of “withdrawn” or “previously presented.” Any claim added by amendment must be indicated with the status of “new” and presented in clean version, *i.e.*, without any underlining.

(4) *When claim text shall not be presented; canceling a claim.*

(i) No claim text shall be presented for any claim in the claim listing with the status of “canceled” or “not entered.”

(ii) Cancellation of a claim shall be effected by an instruction to cancel a particular claim number. Identifying the status of a claim in the claim listing as “canceled” will constitute an instruction to cancel the claim.

(5) *Reinstatement of previously canceled claim.* A claim which was previously canceled may be reinstated only by adding the claim as a “new” claim with a new claim number.

Nowhere in applicants originally filed disclosure is there any teaching of **about** 40°C and **about** -25°C. Clearly applicant does not have support for **about**, which changes the scope of the claims and invention for which no support is provided. **This is a new matter rejection.**

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaplen et al. (US 6913877).

Applicant claims a solid bio-material comprising epidermal tissues from fish, fowl or tortoises.

Chaplen teaches a biosensor comprising a bio-material of epidermal tissues separated from fish. Epidermal tissue of fish are used to detect an electromagnetic signal (abstract, , col. 1-2, col, 5-11, see all examples).

Although the reference does not explicitly teach melanin crystalloids, it is well known that epidermal pigmentation is in crystalloid form, therefore, the product of Chaplen inherently has the claimed characteristic.

The patentability of a product does not depend on its method of production. If the claimed product is the same or obvious from a product in the prior art (i.e. the product disclosed in the cited reference), the claim is unpatentable even though the reference product was made by a different process. When the prior art discloses a product which reasonably appears to be identical with or slightly different than the

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claimed product-by-process, rejections under 35 U.S.C 102 and/or 35 U.S.C 103 are proper. (MPEP 2113).

Therefore, the reference anticipates the claimed subject matter.

Claim 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Elwing et al. (Biosensors & Bioelectronics, 1990, p. 449-459).

Applicant claims a solid bio-material comprising epidermal tissues from fish, fowl or tortoises.

Elwing teaches a biosensor comprising a bio-material of epidermal tissues separated from fish. Epidermal tissue of fish are used to detect an electromagnetic signal (see whole article).

Although the reference does not explicitly teach melanin crystalloids, it is well known that epidermal pigmentation is in crystalloid form, therefore, the product of Elwing inherently has the claimed characteristic.

The patentability of a product does not depend on its method of production. If the claimed product is the same or obvious from a product in the prior art (i.e. the product disclosed in the cited reference), the claim is unpatentable even though the reference product was made by a different process. When the prior art discloses a product which reasonably appears to be identical with or slightly different than the claimed product-by-process, rejections under 35 U.S.C 102 and/or 35 U.S.C 103 are proper. (MPEP 2113).

Therefore, the reference anticipates the claimed subject matter.

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Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Athenstaedt et al. (Science, 1982, p. 1018-1020).

Applicant claims a solid bio-material comprising epidermal tissues from fish, fowl or tortoises.

Athenstaedt teaches a bio-material comprising epidermal tissues which can detect electromagnetic signals (abstract).

Although the reference does not explicitly teach melanin crystalloids, it is well known that epidermal pigmentation is in crystalloid form, therefore, the product of Athenstaedt inherently has the claimed characteristic.

The patentability of a product does not depend on its method of production. If the claimed product is the same or obvious from a product in the prior art (i.e. the product disclosed in the cited reference), the claim is unpatentable even though the reference product was made by a different process. When the prior art discloses a product which reasonably appears to be identical with or slightly different than the claimed product-by-process, rejections under 35 U.S.C 102 and/or 35 U.S.C 103 are proper. (MPEP 2113).

Therefore, the reference anticipates the claimed subject matter.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIFFANY M. GOUGH whose telephone number is (571)272-0697. The examiner can normally be reached on M-F 8-5 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ralph Gitomer/
Primary Examiner, Art Unit 1657

/Tiffany M Gough/
Examiner, Art Unit 1657